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BIRDS OF CENTRAL ALBERTA.

BY SIDNEY S. S. STANSELL.

I AM located thirty miles northwest of the city of Edmonton, the capitol of Alberta, which is situated in about 114° west longitude and $53\frac{1}{2}^{\circ}$ north latitude. It is in the center of a rich farming district where all kinds of small grains and small fruits are raised in abundance.

The country is peculiar in having large and small 'pot holes,' large and small lakes, large and small spruce and tamarack swamps. Portions are very heavily wooded, mostly with birch, black and white poplars, and with an almost impenetrable deciduous undergrowth. The larger trees afford a splendid nesting site for the arboreal hawks and owls; the birches are the delight of the vireos and grosbeaks, for never was there a more magnificent home for them. The thick deciduous undergrowth forms an ideal retreat for some of the warblers and ground nesting birds. Lakes of all sizes, from a quarter of an acre up to several thousand acres in extent, are found in large numbers; small sloughs and marshy hay meadows are everywhere in evidence, furnishing admirable places for ducks, snipe, etc.

My list of birds was begun in the summer of 1906, and although I was not able to do much that year, during the summer of 1907-08 and 1909 I kept a careful list, noting the date of first arrival, when the species became common, and when it passed on further north, in case it did not breed here.

This is a most interesting locality for one who has time for field work. I have been greatly surprised on several occasions by seeing birds that I did not think were here, nor did any of my ornithological books give them as residents here, nor even as accidental visitants. Of all my surprises the two greatest were when I saw the Mourning Dove and the American Woodcock — two species which breed here, but how abundantly I cannot at present venture to say.

My list would have been a great deal larger if I had been able to visit the districts lying to the west and south, but as time would not

permit me to do this I will have to be content with the list here given and trust that new species may be added each year until the list is complete.

LIST OF SPECIES.

1. ***Aechmophorus occidentalis***. WESTERN GREBE.—These birds are somewhat rare in this immediate locality but are quite common and nest in very large colonies some sixty miles to the southeast.
2. ***Colymbus holboëlli***. HOLBØLL'S GREBE.—Our most common form of the grebe family, found in nearly every pond and small lake of an acre or more in extent.
3. ***Colymbus auritus***. HORNED GREBE.—Seen on several occasions and found nesting, but not common.
4. ***Colymbus nigricollis californicus***. EARED GREBE.—Fairly common but not so numerous as Holboëll's Grebe.
5. ***Podilymbus podiceps***. PIED-BILLED GREBE.—This is the rarest of the grebes in this locality.
6. ***Gavia immer***. LOON.—Very numerous. A pair is usually found on every lake of more than an acre in extent and the larger lakes of from five to twenty-five acres have two or more pairs nesting on them.
7. ***Larus argentatus***. HERRING GULL.—A great many are seen during spring and fall, and at times through the summer, but I have not found them nesting.
8. ***Larus philadelphia***. BONAPARTE'S GULL.—Very rare; seen but twice in four years.
9. ***Sterna forsteri***. FORSTER'S TERN.—I have seen but one pair in this locality but I have authentic report of large colonies some sixty miles to the southeast of here.
10. ***Sterna hirundo***. COMMON TERN.—Not very common in this vicinity but quite numerous on some of the larger lakes.
11. ***Sterna paradisæa***. ARCTIC TERN.—I have seen but one pair in this locality, in 1907.
12. ***Hydrochelidon nigra surinamensis***. BLACK TERN. Very abundant, nesting in nearly every accessible pond or lake, laying their three eggs on a pile of decayed vegetation or on top of a deserted grebe's nest.
13. ***Mergus americanus***. MERGANSER.—Seen but once, on the Saskatchewan River near Edmonton.
14. ***Mergus serrator***. RED-BREASTED MERGANSER.—Very common in the spring and fall but has not been found breeding.
15. ***Anas platyrhynchos***. MALLARD.—Our most abundant duck, nesting either in the sloughs or several hundred yards from the water on the uplands usually covered with deciduous undergrowth.
16. ***Nettion carolinensis***. GREEN-WINGED TEAL.—Very common along the smaller and shallower ponds and lakes where it places its nest in the shelter of a bush or under the edge of a pile of brush.

17. **Querquedula discors.** BLUE-WINGED TEAL.— Not so common as *N. carolinensis*, but seen quite often.

18. **Spatula clypeata.** SHOVELLER.— More common in spring and fall than in summer. Usually found in company with the Mallard.

19. **Dafila acuta.** PINTAIL.— Not nearly as numerous as the Mallard, but quite often found nesting.

20. **Marila americana.** REDHEAD.— Very rare; seen only during spring and fall.

21. **Marila vallisneria.** CANVAS-BACK.— Very rare; about as common as *M. americana*.

22. **Marila affinis.** LESSER SCAUP DUCK.— Fairly common in spring and fall, but not met with during the summer.

23. **Marila collaris.** RING-NECKED DUCK.— Very rare; seen but once, during the spring of 1907.

24. **Clangula clangula americana.** GOLDEN-EYE.— Quite common during the spring and fall and met with occasionally in summer. A nest found near here with ten eggs.

25. **Charitonetta albeola.** BUFFLE-HEAD.— Almost as common as the Mallard; nearly every small pond has its pair, and some of them two pairs, of this beautiful little duck. When two or more pairs occupy a single pond, the males are usually very pugnacious, often quarreling and trying to drive each other off the pond for hours at a time.

26. **Harelda hyemalis.** OLD-SQUAW.— Only one specimen seen, which was brought in by a taxidermist.

27. **Oidemia americana.** SCOTER.— Several of these birds were seen flying over Little Devils Lake, July 7, 1909,— the only ones I have seen.

28. **Oidemia deglandi.** WHITE-WINGED SCOTER.— Seen but twice, once in May and once in July.

29. **Oidemia perspicillata.** SURF SCOTER.— One male seen July 7, 1909, on the Sturgeon River, some ten miles to the northwest.

30. **Chen hyperborea.** SNOW GOOSE.— But one specimen seen. Very rare.

31. **Branta canadensis.** CANADA GOOSE.— A very common migrant; great flocks seen each spring and fall. They nest about sixty miles west of here.

32. **Branta nigricans.** BLACK BRANT.— Seen but twice; very rare in this immediate locality.

33. **Botaurus lentiginosus.** BITTERN.— Quite common along the sloughs and marshy lands, where it nests.

34. **Ardea herodias.** GREAT BLUE HERON.— Very rare in this immediate vicinity, but nests in large colonies some sixty miles to the southeast.

35. **Grus americana.** WHOOPING CRANE.— A very common migrant, stopping at least for part of the summer along the larger lakes. One nest was located, which was afterwards abandoned.

36. **Grus canadensis.** LITTLE BROWN CRANE.— Seen occasionally, but not known to nest here.

37. **Rallus virginianus.** VIRGINIA RAIL.—Very rare; identified but once.

38. **Porzana carolina.** SORA RAIL.—Their call is heard during the summer along nearly every slough and along the edge of every lake or pond that affords them a nesting site. I have found them nesting in bunches of grass growing in three feet of water, twenty yards from shore.

39. **Fulica americana.** COOT.—Very common, constructing its nest of rushes usually about six inches above the water in overflowed meadows and along the borders of lakes and ponds.

40. **Lobipes lobatus.** NORTHERN PHALAROPE.—I have seen but one specimen, brought in by a taxidermist.

41. **Steganopus tricolor.** WILSON'S PHALAROPE.—Only one pair seen, May 23, 1908.

42. **Philohela minor.** WOODCOCK.—I had this species reported to me both in the spring and fall of 1908, but did not observe them myself until July 1, 1909, when I saw six or eight along the edge of a wet meadow.

43. **Gallinago delicata.** WILSON'S SNIPE.—Very common. Their nests are found in wet hay meadows and marshy lands, consisting of merely a depression in the ground lined with a few grasses or without lining.

44. **Totanus melanoleucus.** GREATER YELLOW-LEGS.—Although not abundant, this species is fairly common, nesting in very wet sloughs in marshy lands. Observed young June 28, 1909.

45. **Totanus flavipes.** YELLOW-LEGS.—Less abundant than the last but seen quite often.

46. **Helodromas solitarius.** SOLITARY SANDPIPER.—Quite common here, almost as numerous as the Spotted Sandpiper. Found a nest in 1908 up 35 feet in a white birch tree, containing three young and one addled egg. The nest was a Robin's, probably two or three years old.

47. **Bartramia longicauda.** UPLAND PLOVER.—Very rare, only a few pairs having been seen.

48. **Actitis macularia.** SPOTTED SANDPIPER.—Very common along the edges of nearly every lake, usually in company with the Solitary Sandpiper.

49. **Oxyechus vociferus.** KILDEER.—Very common where there are lakes and ponds.

50. **Bonasa umbellus umbelloides.** GRAY RUFFED GROUSE.—Very common in the heavily wooded portion.

51. **Bonasa umbellus togata.** CANADIAN RUFFED GROUSE.—Very common; about as numerous as *B. umbellus umbelloides*. Saw several broods of both species during the summer of 1909, when they were more numerous than three years ago. Severe winters kill a great many of these birds. They feed largely in winter on poplar buds and any berries that remain on the bushes during the winter; especially the high-bush cranberry.

52. **Pediceetes phasianellus.** SHARP-TAILED GROUSE.—Very rare; seen but a few times and then only a few at a time.

53. **Zenaidura macroura carolinensis.** MOURNING DOVE.— Only one seen, on June 28, 1909.

54. **Circus hudsonius.** MARSH HAWK.— Quite common in the more open districts, especially in localities where the land is low and marshy.

55. **Accipiter velox.** SHARP-SHINNED HAWK.— Not very common.

56. **Accipiter cooperi.** COOPER'S HAWK.— Seen but once,— in May, 1907, near Edmonton.

57. **Astur atricapillus.** GOSHAWK.— Quite common; makes its home mostly in the deeply wooded portions of the country.

58. **Buteo borealis calurus.** WESTERN RED-TAIL.— Quite common in the more open portions; very few in this immediate wooded locality.

59. **Buteo swainsoni.** SWAINSON'S HAWK.— Very rare in this immediate locality, but nests some twelve miles to the westward.

60. **Buteo platypterus.** BROAD-WINGED HAWK.— Fairly common, where they nest preferably in birch trees at a low elevation.

61. **Archibuteo lagopus sancti-johannis.** ROUGH-LEGGED HAWK.— Quite common.

62. **Aquila chrysaëtos.** GOLDEN EAGLE.— Fairly common in the wooded portions where they nest in the tallest spruces, or more commonly in poplars.

63. **Haliaëtus leucocephalus.** BALD EAGLE. Not as common as *A. chrysaëtos*. A nest was located in top of large poplar tree, up sixty feet, which contained nearly full-fledged young June 29, 1909. This nest was near a very large lake.

64. **Falco rusticolus.** GRAY GYRFALCON.— Rare. Seen but once, which was during the severe winter of 1906-07.

65. **Falco columbarius richardsoni.** RICHARDSON'S PIGEON HAWK.— Seen here each year, but quite rare.

66. **Falco sparverius.** SPARROW HAWK.— Quite common; more numerous in the semi-wooded portions and where the country is partially settled than in the uninhabited deep woodlands.

67. **Asio accipitrinus.** SHORT-EARED OWL.— Seen but once, June 7, 1909, in the edge of a large swamp.

68. **Cryptoglaux acadica.** SAW-WHET OWL.— Only one seen. I was attracted to it one day in the winter of 1907-08 by the chatter of about fifty Canada Jays. I immediately saw it was a Saw-whet and added the skin to my collection.

69. **Bubo virginianus pallescens.** WESTERN HORNED OWL.— Fairly common in the deep woods where it appropriates an old hawk's nest as a suitable place to rear its young.

70. **Nyctea nyctea.** SNOWY OWL.— Somewhat rare in this locality although a nest was found with six eggs, which two days later became six little fluffy balls of down. This was June 10, 1909.

71. **Surnia ulula caparoch.** HAWK OWL.— These birds were very common during the severe winter of 1906-07, but have been quite rare since. One nest was found in 1909 with six eggs, in a dead stub in a spruce swamp.

72. **Ceryle alcyon.** BELTED KINGFISHER.—Extremely rare, having been seen but a few times. Once a bird came within a few feet of the house and sat perched in a tree for several minutes.

73. **Dryobates villosus leucomelas.** NORTHERN HAIRY WOODPECKER.—Fairly common here, at certain times only.

74. **Dryobates pubescens nelsoni.** NORTHERN DOWNY WOODPECKER.—Fairly common.

75. **Picoides arcticus.** ARCTIC THREE-TOED WOODPECKER.—Quite common, from early fall until late in spring.

76. **Sphyrapicus varius.** YELLOW-BELLIED SAPSUCKER.—The most common of all the Woodpeckers. Nests generally in live white poplar trees, anywhere from four feet to fifty feet from the ground. I have found several sets of eggs where incubation was very much advanced when there were only three eggs, so presume they were complete sets.

77. **Ceophloeus pileatus abieticola.** NORTHERN PILEATED WOODPECKER.—Very rare; seen only in deep woodlands.

78. **Colaptes auratus luteus.** NORTHERN FLICKER.—In the summer of 1906 these birds were very scarce; by 1908 they were very common, and during the summer of 1909 were more numerous than during 1908.

79. **Chordeiles virginianus henryi.** WESTERN NIGHTHAWK.—Very common. Nests on some hill in the edge of the woods where they deposit their two eggs on the bare ground.

80. **Archilochus colubris.** RUBY-THROATED HUMMINGBIRD.—Very rare; seen but a few times.

81. **Tyrannus tyrannus.** KINGBIRD.—Very common, nesting in small trees or on the tops of old burned stubs.

82. **Sayornis phoebe.** PHOEBE.—Very common, nesting in barns, deserted houses, or under the bank of some stream; raises two broods.

83. **Sayornis saya.** SAY'S PHOEBE.—Several birds seen in the yard one day only.

84. **Myiochanes richardsoni.** WESTERN WOOD PEWEE.—Very common, placing its nest either on a horizontal limb or in the fork of an upright branch. The nest is much larger than that made by the eastern form.

85. **Empidonax flaviventris.** YELLOW-BELLIED FLYCATCHER.—Very rare. Seen only during the summer of 1906, near Edmonton, where I secured a specimen and photographed the nest and eggs.

86. **Empidonax minimus.** LEAST FLYCATCHER.—Very numerous. Their nests are placed in small trees or bushes at any elevation above three feet from the ground.

87. **Cyanocitta cristata.** BLUE JAY.—Quite common, but not as numerous as *P. canadensis*. Last year they nested within one hundred yards of the house.

88. **Perisoreus canadensis.** CANADA JAY.—Very common, nesting in February, March, or April, according to the severity of the winter. The nest is located either in a willow or evergreen tree, usually spruce, anywhere from seven to thirty feet up.

89. **Corvus corax principalis.** NORTHERN RAVEN.—Somewhat rare. Seen only during spring or fall.

90. **Corvus brachyrhynchos.** CROW.—Very common in the older and more settled parts but rarely seen or heard in the deep woods.

91. **Molothrus ater.** COWBIRD.—Very numerous, following cattle and horses, flying upon their backs and eating mosquitoes.

92. **Zanthocephalus zanthocephalus.** YELLOW-HEADED BLACKBIRD.—Very rare; seen but once, which was in the spring of 1909.

93. **Agelaius phoeniceus fortis.** THICK-BILLED REDWING.—Very numerous. Nests in same manner as the eastern form.

94. **Sturnella magna neglecta.** WESTERN MEADOWLARK.—The song of this bird is very much different from that of the eastern form, it having more of a blackbird-like call, and is much sweeter. They are becoming quite common.

95. **Icterus galbula.** BALTIMORE ORIOLE.—During the summer of 1906 these birds were very scarce but are now becoming more numerous, even penetrating the more heavily wooded sections.

96. **Euphagus carolinus.** RUSTY BLACKBIRD.—Nearly everywhere common but nowhere numerous. Usually nest along some slough or creek where they place their nests from three to ten feet above the water. The male of a pair which were nesting in a small slough near my house was suddenly taken away to appease the hunger of some young Goshawks. The female soon mated again, and this time they chose a birch tree in the deep woods, about one hundred yards from the slough, where they raised their brood undisturbed.

97. **Euphagus cyanocephalus.** BREWER'S BLACKBIRD.—Somewhat more numerous than the preceding. Their nests are usually placed on the ground, in a brushpile or hollow tree, or at a low elevation in bushes.

98. **Quiscalus quiscula seneus.** BRONZED GRACKLE.—Very common. Many nests are placed in dead stubs, where a cavity has been made, either by some woodpecker or by a fire.

99. **Hesperiphona vespertina.** EVENING GROSBEAK.—Quite rare. I located a nest in June, 1908, which contained a dead full-fledged young male. The nest was up 40 feet in a white birch tree.

100. **Pinicola enucleator leucura.** PINE GROSBEAK.—Very common here during the winter only, when they may be seen in large flocks feeding on poplar buds.

101. **Carpodacus purpureus.** PURPLE FINCH.—Very common. These birds do a great deal of singing while on the wing.

102. **Loxia leucoptera.** WHITE-WINGED CROSSBILL.—Very rare; seen but once, in edge of a deep spruce swamp.

103. **Leucosticte tephrocotis.** ROSY FINCH.—Rare; seen only during the winter, usually in company with Pine Grosbeaks.

104. **Acanthis linaria.** REDPOLL.—Very numerous during the late fall, winter, and early spring.

105. **Astragalinus tristis.** GOLDFINCH.—Very numerous during the

summer of 1906, but somewhat scarce during the summer of 1907; since then they have been very rare.

106. **Spinus pinus.** PINE SISKIN.—Very common. These birds remain in flocks even while nesting; no less than six pairs are almost continually around the house.* When I first noticed them carrying nesting material they picked out fine rootlets from the garden; then, about a week later, they carried away numerous feathers and mouthfuls of hair. I watched their flight but could not locate their nests as the woods here are extremely dense.

107. **Plectrophenax nivalis.** SNOWBUNTING.—Very numerous in the fall, winter, and early spring; always seen in large flocks, generally in the open fields.

108. **Calcarius lapponicus.** LAPLAND LONGSPUR.—Quite common during spring and fall. I have no knowledge of their breeding here.

109. **Poecetes gramineus confinis.** WESTERN VESPER SPARROW.—Very common in the open woodlands and clearings.

110. **Passerculus sandwichensis alaudinus.** WESTERN SAVANNAH SPARROW.—One of our most common sparrows, frequenting the more open districts.

111. **Ammodramus nelsoni.** NELSON'S SPARROW.—Only fairly common, frequenting the low marshy hay meadows.

112. **Zonotrichia leucophrys.** WHITE-CROWNED SPARROW.—Common only during spring and fall migration. I do not know whether it nests in this locality.

113. **Zonotrichia albicollis.** WHITE-THROATED SPARROW.—This is one of our most common sparrows, nesting in the deep woods as well as in the more open districts. Its nest is located either in a tangle of brush or near some fallen tree. Their most beautiful song, to me, is a sweet whistling call of *Oh see-me me me me me*; sometimes only *Oh see me*, and again *Oh see*.

114. **Spizella monticola ochracea.** WESTERN TREE SPARROW.—Very numerous here during spring and fall migration but to my knowledge it does not breed near.

115. **Spizella passerina.** CHIPPING SPARROW.—Quite common, especially in the vicinity of evergreens.

116. **Spizella pallida.** CLAY-COLORED SPARROW.—One of our most numerous sparrows, preferring the more brushy deciduous undergrowth where it places its nest, either on the ground or near it in some low bush.

117. **Junco hyemalis.** SLATE-COLORED JUNCO.—Very numerous. Prefers the mossy swamps in which to build its nest, although I have found it nesting within fifty feet of the house under the edge of an artificial bank. Two broods are reared each year.

118. **Melospiza melodia.** SONG SPARROW.—Very common along the more open streams and open swampy lands.

119. **Melospiza georgiana.** SWAMP SPARROW.—Fairly common in the wet hay sloughs and along wet and marshy runs.

120. ***Passerella iliaca***. FOX SPARROW.— Very common, and one of our sweetest, if not the sweetest singer of the whole sparrow family. They seem to prefer the wooded districts where there is an abundance of thick deciduous undergrowth.

121. ***Passer domesticus***. ENGLISH SPARROW.— When I saw the city of Edmonton for the first time (in April, 1906) there were but few of these birds to be seen anywhere, but now (summer, 1909) they number thousands. They are driving away such birds as the House Wren, Mountain Bluebirds, Juncos, White-throated Sparrows, etc., which used to nest in abundance in the streets and in the back yard of many houses.

122. ***Zamelodia ludoviciana***. ROSE-BREADED GROSBILL.— Very common, especially in the deep woods and partially open woodlands. Less common in the more open sections.

123. ***Piranga ludoviciana***. WESTERN Tanager.— Very rare; have seen it but a few times in this locality.

124. ***Petrochelidon lunifrons***. CLIFF SWALLOW.— Very abundant during the summer of 1908; over one hundred nests were built on the end of one small barn. But during the summer of 1909 they were very scarce, the reason for which is not evident.

125. ***Hirundo erythrogastra***. BARN SWALLOW.— A very common summer visitant.

126. ***Iridoprocne bicolor***. TREE SWALLOW.— Nowhere abundant but nearly everywhere common.

127. ***Riparia riparia***. BANK SWALLOW.— Very rare in this immediate locality but quite common along the Saskatchewan River about thirty miles distant.

128. ***Bombycilla garrula***. BOHEMIAN WAXWING.— Very common during the spring and fall, but I do not know of their nesting in this locality.

129. ***Bombycilla cedrorum***. CEDAR WAXWING.— Very common. Nesting usually in low willow bushes, generally near water. I have seen their nests built only a few inches above the water, in a willow projecting out over a small stream.

130. ***Lanius borealis***. NORTHERN SHRIKE.— Very rare; seen but a few times. I do not know of their nesting near here.

131. ***Vireosylva olivacea***. RED-EYED VIREO.— Very common. I do not believe there were less than ten pairs to every quarter section in the wooded districts.

132. ***Vireosylva philadelphia***. PHILADELPHIA VIREO.— I consider this bird very common although not as common as the Red-eye. They breed in this locality but I have never located their nests.

133. ***Vireosylva gilva swainsoni***. WESTERN WARBLING VIREO.— Only fairly common. A nest was found in a birch tree, up about thirty-five feet, near a running stream.

134. ***Mniotilta varia***. BLACK AND WHITE WARBLER.— Very rare, having been seen only in two different years. I do not know as to their breeding here.

135. **Vermivora peregrina.** TENNESSEE WARBLER.—Nowhere common, although a few pairs nest in the immediate vicinity.

136. **Dendroica aestiva.** YELLOW WARBLER.—Quite common, nesting in low bushes and small birch trees.

137. **Dendroica coronata.** MYRTLE WARBLER.—Quite common during spring and fall, but I have not found them nesting near here.

138. **Dendroica maculosa.** MAGNOLIA WARBLER.—Very common during spring and fall migrations, but I have not found them nesting.

139. **Dendroica striata.** BLACK-POLL WARBLER.—Very rare; has been seen only a few times.

140. **Seiurus aurocapillus.** OVEN-BIRD.—Very numerous. I would estimate that there were at least eight pairs to the quarter section in the deep woods, where they build their nests.

141. **Seiurus noveboracensis notabilis.** GRINNELL WATER-THRUSH.—Quite numerous during the spring migration and one has been singing in my back yard ever since he arrived last spring. I do not know as to their nesting but should not imagine they would spend the summer here and not nest.

142. **Geothlypis tolmiei.** MACGILLIVRAY'S WARBLER.—Last year I was of the opinion that this species was very rare, but this year they have been very common. I have found at least six pairs within a radius of two hundred yards. They nest in the low deciduous underbrush, placing their nests within a few inches of the ground.

143. **Geothlypis trichas.** MARYLAND YELLOW-THROAT.—Very common along the wet, marshy sloughs and hay meadows, where it usually nests.

144. **Setophaga ruticilla.** REDSTART.—Very common. Nesting in low bushes and trees. I found one nest which after having been completed was entirely covered on the outside with down taken from the deserted nest of a domestic goose.

145. **Anthus pensilvanicus.** PIPIT.—Quite common in the spring when they are seen in the open portions of the country in large flocks.

146. **Dumetella carolinensis.** CATBIRD.—Rare. I have seen less than a half-dozen pairs in four years, and but one nest.

147. **Troglodytes aëdon.** HOUSE WREN.—Very common, rearing two broods.

148. **Sitta canadensis.** RED-BREASTED NUTHATCH.—Very rare. Seen only in deep woods where I presume it nests.

149. **Penthestes atricapillus.** CHICKADEE.—Very common, nesting generally in holes excavated by itself, but sometimes appropriating the deserted nest of some woodpecker.

150. **Penthestes hudsonicus.** HUDSONIAN CHICKADEE.—Very rare; seen only a few times, in deep tamarack swamps. I presume they nest here.

151. **Regulus satrapa.** GOLDEN-CROWNED KINGLET.—Very rare; seen but a few times.

152. **Hylocichla fuscescens salicicola.** WILLOW THRUSH.—Very common.

153. **Hylocichla aliciae.** GRAY-CHEEKED THRUSH.— Very rare; seen only during migration and then very seldom.

154. **Hylocichla ustulata swainsoni.** OLIVE-BACKED THRUSH.— The most common of the thrushes. It places its nest from two to twenty-five feet above ground.

155. **Hylocichla guttata pallasi.** HERMIT THRUSH.— Very rare. Seen only during migration.

156. **Planesticus migratorius.** ROBIN.— Very common. This bird nests almost as abundantly in the deep woods as in the more open and settled portions. Two broods are usually raised.

157. **Sialia currucoides.** MOUNTAIN BLUEBIRD.— Very common in the open portions of the country but never seen in the heavily wooded sections. Two broods are raised.



THE BIRDS OF COLORADO — THIRD SUPPLEMENT.

BY WELLS W. COOKE.

THE original 'Birds of Colorado' was published in 1897 as Bulletin No. 37 of the Colorado State Agricultural Experiment Station. It was followed a year later by the first supplement as Bulletin No. 44 of the same institution, and the second supplement was published in 1900 as Bulletin No. 56. The original bulletin enumerated 363 species as occurring in Colorado, of which 230 were known to breed in the State. The next year the total was increased to 374 and the breeders to 236. The year 1900 showed 387 species known to occur in the State, with 243 breeders.

The present publication withdraws 12 of these 387 as having been admitted to the State list on insufficient evidence or as not now considered valid forms. At the same time it recognizes 22 additional species as entitled to a place in the State list. Thus the present known avifauna of Colorado totals 397 species — a number probably exceeded by only two States, California and Texas. It is interesting to note that of these 22 additions, 9 had been mentioned in the second supplement as likely to occur in Colorado, while the other 13 are unexpected additions or arise from the recognition of subspecific forms. The number of species now known to breed in